

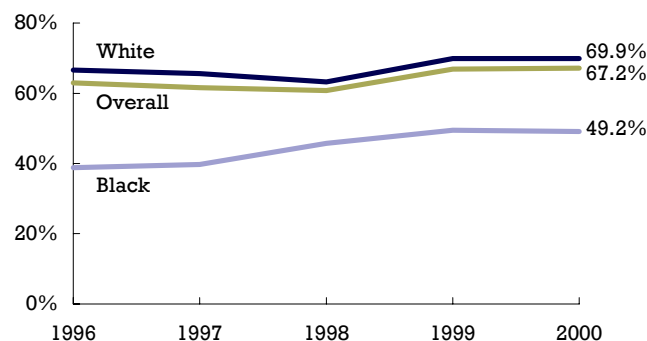
# MI PRAMS Delivery

## Breastfeeding Practices Among Mothers in Michigan

Breastfeeding is regarded as the most complete form of nutrition for an infant because breast milk contains a full supply of nutrients in an age-appropriate balance to promote optimal growth. An enormous amount of research has documented the numerous additional ways in which breastfeeding enhances the health and well-being of both the mother and infant (see page 2). Because breastfeeding is so beneficial, the American Academy of Pediatrics released a statement in 1997 advocating that all mothers breastfeed exclusively for at least the first six months and continue breastfeeding for at least the first year of their infants' lives. In addition, Healthy People 2010 has issued an objective to increase the prevalence of breastfeeding to 75 percent in the early postpartum period, 50 percent at six months postpartum, and 25 percent at one year postpartum.

The Pregnancy Risk Assessment Monitoring System (PRAMS) contains a wealth of information about

**Figure 1. Trend in Breastfeeding Initiation by Sociodemographic Group, Michigan, 1996-2000**



breastfeeding practices among mothers in Michigan. PRAMS asks women how long they breastfed, if ever, and reasons why women never started or stopped breastfeeding (see page 3). The survey also questions women who did initiate breastfeeding about the age at which their infants were introduced to formula or foods other than breast milk.

The prevalence of breastfeeding initiation (i.e. ever breastfed, regardless of length of time) averaged 63.9 percent among Michigan mothers between the years 1996 and 2000. The prevalence declined from 62.9 percent in 1996 to 60.8 percent in 1998, and rose considerably since then to

67.2 percent in 2000 (Figure 1).

White mothers were more likely to have initiated breastfeeding (67.1 percent average) than black mothers (44.7 percent average). The trend in breastfeeding initiation differed between white and black women. The trend for white women mirrors the general trend described above — the percentage fell from 66.6 percent in 1996 to 63.2 percent in 1998 and rose to 69.9 percent in 2000. Among black women, the prevalence of breastfeeding initiation rose each year of the study period, from 38.9 percent in

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### Special points of interest:

- Breastfeeding initiation in Michigan rose nearly 11 percent from 1998 to 2000.
- Women most likely to initiate breastfeeding include white women and women of a race other than black or white, women greater than 30 years of age, women with household incomes greater than \$40,000, and college-educated women.
- 43.9 percent of breastfeeding initiators were still breastfeeding at the time of survey completion (two to six months postpartum).
- Exclusive breastfeeding in Michigan is rare — only 10.3 percent of breastfeeding initiators had fed their infants only breast milk as of the time of survey completion.

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1996 to 49.2 percent in 2000, although the majority of this increase occurred between the years 1997 and 1999 (39.8 percent to 49.5 percent).

The overall percentage of breastfeeding initiation among women of other races during the study period was 79.4 percent, which was substantially higher than those of white and black women. The trend for this group of women could not be assessed due to small numbers in each individual year.

Breastfeeding initiation was also examined according to maternal age, education, and income. Compared with women of lower socioeconomic status, women in higher socioeconomic groups were more likely to have initiated breastfeeding (Fig 1).

Of women who had initiated breastfeeding, 43.9 percent were still breastfeeding at the time they completed their surveys at two to six months postpartum (see Methodology, back). The majority of mothers who chose to stop breastfeeding generally did so relatively early in the

postpartum period. Of these mothers, 25 percent had stopped breastfeeding by the second week postpartum, 50 percent had stopped by six weeks postpartum, and 75 percent had stopped by eleven weeks postpartum; 11.2 percent breastfed for less than a week postpartum (see Fig. 2 & 3 for reasons for stopping and not initiating).

Few mothers fed their infants breast milk exclusively, even during the first few weeks postpartum. Of the women who had initiated breastfeeding, 89.7 percent had introduced formula or other food by the time they completed their surveys; 22.8 percent had introduced other food by the end of the first week postpartum. Half of the women had introduced formula or other food by the fourth week and three-quarters of the mothers had introduced an alternate by the eighth week postpartum.

Although breastfeeding initiation increased to its highest level in 2000, it did not meet the national objective calling for a breastfeeding prevalence of at least 75 percent in the early postpartum period. The groups of women who did meet the objective were

women who belonged to racial groups other than black or white, women over 30 years of age, women with annual household incomes over \$40,000, and women with a college education. Due to the study design, it is not possible to monitor the objectives regarding prevalence of breastfeeding at six and twelve months. However, it is clear that current efforts to increase the initiation of breastfeeding need to continue, especially among socially disadvantaged women. In addition, women need to be encouraged to continue breastfeeding for at least the first year and should be educated about the benefits of exclusively breastfeeding during the first six months postpartum. Other initiatives that may increase the prevalence and duration of breastfeeding initiation include worksite programs that promote breastfeeding (e.g. by providing breast pumps and peer counselor support) and education of physicians and the public about the benefits of breastfeeding.

#### PRAMS Fast Facts: Information on Prenatal Counseling About Breastfeeding Information

The proportion of women in Michigan who were counseled about breastfeeding by a health care provider has changed little, hovering around 80 percent between 1996 (80.9 percent) and 2000 (79.6 percent).

## Benefits of Breastfeeding

- **Infant Health:** Studies show that breastfeeding enhances immunity in infants, particularly against diarrhea, lower respiratory infection, otitis media, necrotizing enterocolitis, and several other infections, compared with infants who are not breastfed. In addition, breastfeeding has been associated with decreased risks for development of Sudden Infant Death Syndrome (SIDS), Crohn's Disease, obesity, and insulin-dependent diabetes mellitus, among others.
- **Maternal Health and Well-Being:** Breastfeeding enables mothers to return to pre-pregnancy weight more quickly; delays ovulation, hence allowing mothers who exclusively breastfeed to space births; reduces the risk of pre-menopausal breast cancer; and affords the opportunity for mothers to bond physically and emotionally with their infants.
- **Economic Benefits:** Breastfeeding is economical to individual families as well as to society at large. Research has indicated that, after adjusting for increased maternal caloric intake, breastfeeding still provides a savings of over \$400 per child during the first year. Nationally, breastfeeding may result in lower health care costs and lower rates of employee absenteeism due to fewer instances of illness in breastfed children.

For more information, see the American Academy of Pediatric's Policy Statement, "Breastfeeding and the Use of Human Milk" in *Pediatrics*, vol. 100, no. 6 (Dec 1997) or the *Breastfeeding Position Paper* by the American Academy of Family Physicians, <http://www.aafp.org/x6633.xml>

## Breastfeeding Support in Michigan: The WIC Program\*

- The WIC program is a staunch advocate of breastfeeding and has implemented a number of initiatives to encourage the practice among their pregnant and postpartum clients, to whom nearly half of the births in Michigan occur.
  - **Mother-to-Mother Program:** Mothers with breastfeeding experience are trained to counsel pregnant and lactating women who may have questions about or problems with feeding their infants. This program, initiated in 1993, currently is active in 18 WIC agencies and is administered by the Michigan State University Extension in collaboration with Michigan WIC.
  - **Breastfeeding Basics Course:** An informational and problem-solving training course offered four times annually to physicians; nurses; public health professionals, including staff of the Maternal Support Service/Infant Support Service, Early Head Start, and Maternal and Infant Health Advocacy Services programs, as well as other breastfeeding advocates. The course arms attendees with the benefits of breastfeeding, information to address mothers' questions and concerns regarding breastfeeding, and medical resources such as dietary recommendations for and pharmaceutical interactions with breastfeeding.
  - **Breast Pump Program:** The WIC program also provides breast pumps to breastfeeding mothers to allow them to continue breastfeeding when they return to work or school.
- According to data collected by the WIC program, the prevalence of breastfeeding initiation among WIC clients rose from 39.5 percent in 1995 to 43.1 percent in 2000, due in part to programs like those described above. This increase has occurred despite the fact that WIC serves a socially disadvantaged population. In addition, the prevalence of breastfeeding initiation varies across WIC agencies, and was reported to be as high as 71.5 percent in the Grand Traverse agency.
- For more information, contact Michigan WIC at [MichiganWIC@michigan.gov](mailto:MichiganWIC@michigan.gov).

\* The Special Supplemental Nutrition Program for Women, Infants, and Children is a federally funded nutrition program that serves pregnant and recently postpartum women and their children under five years of age who are income eligible (at or below 185 percent of the federal poverty guidelines or on Medicaid) and demonstrate nutritional or medical risk (e.g. anemia, less than recommended weight gain during pregnancy, developmental disability, etc.).

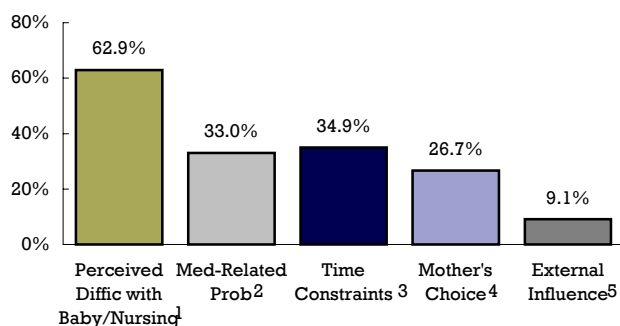
### National Breastfeeding Information

- ✧ Subsequent to a 17 percent decline in the mid-to-late 1980's, the national prevalence of breastfeeding initiation (in-hospital) increased from 51.5 percent in 1990 to 68.4 percent in 2000.
- ✧ Breastfeeding initiation exhibits geographic variation. Women in the Mountain and Pacific Regions were much more likely to report initiating breastfeeding (81.6 percent and 81.8 percent, respectively) compared with women residing in other regions.

*Mother's Survey, Abbott Laboratories*

## Reasons Why Women Stopped or Never Started Breastfeeding (PRAMS)

**Figure 2. Categorized Reasons Why Breastfeeding Initiators Stopped Breastfeeding, Michigan, 2000**



<sup>1</sup>Baby had difficulty nursing (29.3%); breast milk alone did not satisfy baby (38.2%); mom thought baby wasn't gaining enough weight (6.2%); baby became sick and couldn't breastfeed (2.3%); or mom thought she wasn't producing enough milk (34.0%).

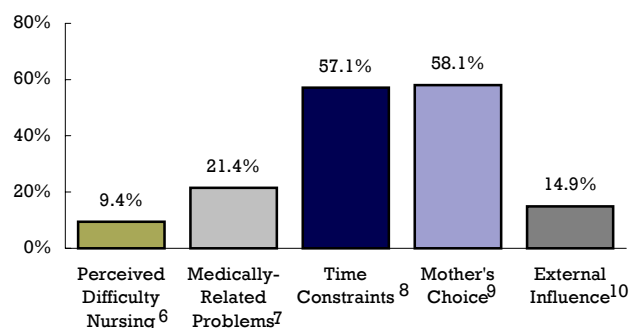
<sup>2</sup>Mom's nipples were sore, cracked, or bleeding (21.3%); mom became sick and couldn't breastfeed (4.5%); or mom didn't eat well enough (11.6%).

<sup>3</sup>Mom had too many household duties (10.0%) or mom went back to work or school (28.9%).

<sup>4</sup>Mom felt it was right time to stop (19.0%) or mom wanted or needed someone else to feed baby (11.5%).

<sup>5</sup>Husband or partner wanted mom to stop (1.3%); family and friends weren't supportive (2.5%); or health care provider recommended stopping (5.4%).

**Figure 3. Categorized Reasons Why Women Never Initiated Breastfeeding, Michigan, 2000**



<sup>6</sup>Mom thought she couldn't produce enough milk (9.4%).

<sup>7</sup>Mom wasn't eating well enough (21.5%).

<sup>8</sup>Mom had other children to take care of (32.8%); mom had too many household duties (15.9%); or mom went back to work or school (39.6%).

<sup>9</sup>Mom didn't like breastfeeding (49.1%); mom didn't want to be tied down (15.9%); or mom wanted her body back to herself (17.6%).

<sup>10</sup>Mom embarrassed to breastfeed (11.5%); husband or partner didn't want mom to breastfeed (4.0%); or family and friends weren't supportive (2.4%).

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## Mailing Address

**Past and future editions of the PRAMS Newsletter will be available electronically. Visit: <http://www.michigan.gov/mdch/>; choose “Pregnant Women, Children & Families” from the menu on the left; select the “Children & Families” submenu; and click on “PRAMS.” If you wish to receive a hard copy in the future, please contact Denise Reinhart at (517) 335-9307 or [ReinhartD@michigan.gov](mailto:ReinhartD@michigan.gov).**

## PRAMS Overview

PRAMS (Pregnancy Risk Assessment and Monitoring System) is a population based survey of maternal experiences and behaviors before and during a woman's pregnancy and during early infancy of her child. African-American women and women who deliver low birth weight infants are over-sampled in order to ensure more accurate estimates. Each year, approximately 1,000-3,000 new mothers are randomly selected from a frame of eligible birth certificates. A survey is mailed out to the women at two to six months after delivery, followed by telephone reminders to those who have not responded. In addition to the mailed surveys, a stratified systematic sample of African-American mothers is selected from six inner-city hospitals, where an initial interview is conducted followed by a mailed survey two to six months later. This is so we can better capture the experiences among African-American mothers and their infants. The results presented are weighted to represent all of Michigan's mothers and infants.

## Suggested Citation

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